

Applicant : Chester F. Grochoski  
Serial No. : 10/034,396  
Page : 7

REMARKS

Applicant respectfully requests reconsideration of the above-identified patent application. Claims 1, 3-8, 10-14, and 22-30 remain in the application. Claims 1, 8, 12, and 22 are amended and claims 27-30 are added to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The rejection under 35 U.S.C. 103(a) as conceivably applied to the amended claims is respectfully traversed.

Claims 15-21 are canceled in the interests of efficient and expeditious prosecution because these claims are largely redundant of other pending claims.

As defined in amended independent claim 1, the present invention is directed to an insulated concrete system including concrete and a concrete curing blanket. The blanket includes an exposed metal foil that forms the lower surface of the blanket, and that directly faces the concrete. As defined in amended independent claims 8 and 22, the present invention is directed to a blanket to be placed over curing concrete. The blanket has an external lower metal foil layer adapted to directly face the concrete. As defined in new independent claim 27, the present invention is directed to a method for curing concrete including pouring concrete, and placing an insulative blanket over the upper surface of the concrete with an external lower metal foil layer directly facing the concrete. The concrete curing blanket in all of the claims reflects a first portion of the heat back into the concrete, and conducts a second portion of the heat laterally across the concrete.

As previously presented, claims 1, 3-8, 10-17, and 19-26 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,549,956 to Handwerker in view of U.S.

Applicant : Chester F. Grochoski  
Serial No. : 10/034,396  
Page : 8

Patent 3,676,641 to Olson. Applicant respectfully traverses this rejection as applied to the amended claims.

Handwerker was addressed in the Response filed February 26, 2003, and those comments are incorporated herein by reference. In summary, Handwerker fails to disclose the basic concept of the present invention – namely, a concrete curing blanket having an exposed metallic foil as the lower surface of the blanket (i.e. the surface that faces the curing concrete).

The Examiner cites Olson in an effort to supplement the acknowledged deficiencies of Handwerker. Although the Examiner cites the Fig. 9 embodiment, only the Fig. 7 embodiment shows a blanket. The Fig. 7 blanket includes a moisture-impervious plastic as the lower surface or layer (81), and a foam vinyl as the upper surface or layer (84). A conductive layer (79) is sandwiched within the blanket for heating the concrete. The Fig. 9 embodiment cited by the Examiner is a framed apparatus (i.e. not a blanket) including a hollow rectangular frame (85) having an open bottom and an open top. Extending across the open top is a wire mesh layer (88) facing the concrete. The wire mesh (88) is an ordinary window screen. An electrically conductive resistance wire (89) is distributed across the wire mesh (88) for heating the concrete through the wire mesh (88) and the frame (85). Overlying the mesh (88) and wire (89) is an insulating filler (91) sandwiched by sheets of metal foil (92) and (93). The lower sheet of foil (92) directs heat from the wire (89) towards the concrete.

Olson does not disclose a lower foil layer that directly faces the concrete, or that forms a lower surface of a blanket. First, the only blanket disclosed by Olson (the Fig. 7 embodiment) does not have an external metal foil. Like Handwerker, the Olson blanket has

Applicant : Chester F. Grochoski  
Serial No. : 10/034,396  
Page : 9

external layers of plastic and vinyl. Second, while the framed apparatus disclosed by Olson (the Fig. 9 embodiment) includes a metal foil (92), it does not suggest a blanket with an exposed metal foil. Olson shows only metal foil layers that are on top of the apparatus (92) or sandwiched within the apparatus (93). The only surface directly facing the concrete is the wire mesh (88).

In fact, Olson actually teaches away from a metal foil layer that directly faces the concrete and that forms a lower surface of a blanket. At column 4, lines 73-75, Olson teaches that the bottom layer of the blanket is a black color in order to be highly reflective of electromagnetic radiation in the ultraviolet and near ultraviolet regions. At column 5, lines 22-25, Olson discloses a metal foil on the top surface of a framed apparatus for shielding against the effects of precipitation in an outdoor environment. In stark contrast, the metal foil of the present invention directly faces the concrete in order to reflect heat (infrared energy, not ultraviolet energy) back into the concrete and to distribute heat laterally. Olson's positioning of the foil as a top layer would only reflect away sunlight, not energy emitted from the concrete being heated.

Further, Olson (like Handwerker) totally fails to recognize, let alone address, lateral heat conduction. As stated, Olson teaches exterior layers of metal foil and/or plastic for reflecting ultraviolet energy and for protection from precipitation. Olson is focused on directing heat vertically, from conductive wires into the concrete. In contrast, the present invention additionally recognizes the benefits of lateral heat conduction and discloses a structure for realizing lateral heat conduction.

In view of the failure of any combination of Olson and Handwerker to disclose,

Applicant : Chester F. Grochoski  
Serial No. : 10/034,396  
Page : 10

teach, or suggest the present invention as defined in the remaining claims, it is respectfully submitted that the rejection under 35 U.S.C. 103(a) is improper and/or overcome, and therefore should be withdrawn.

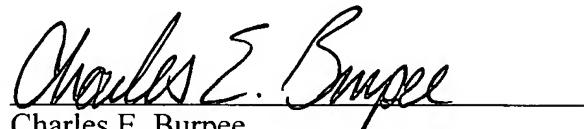
Applicant additionally submits that any conceivable combination of Olsen and Handwerker fails to disclose, teach, or suggest new method claims 27-30.

In conclusion, it is respectfully submitted that the present application is fully in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

CHESTER F. GROCHOSKI

By: Warner Norcross & Judd LLP

  
Charles E. Burpee  
Registration No. 29 776  
900 Fifth Third Center  
111 Lyon Street, N.W.  
Grand Rapids, MI 49503-2487  
(616) 752-2141

61900.74677